

Drug Use Trends in New York City: 2013

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ABSTRACT

This report describes drug patterns and trends for the five boroughs of New York City in 2013. The two key findings for New York City for 2013 were the continuing predominance in indicators for heroin and opioid analgesics. Opioids were involved in nearly three-quarters (71 percent) of unintentional drug poisoning deaths. After 4 years of a steady decrease in the rate of heroin-involved drug poisoning deaths (overdose deaths), from 2010 to 2012 heroin-involved deaths increased by 84 percent, from 3.1 to 5.7 per 100,000 population. The rate of drug poisoning deaths involving opioid analgesics increased by 267 percent from 2000 to 2011 from 0.9 to 3.3 per 100,000 population (59 versus 220 deaths); however, from 2011 to 2012, the rate decreased by 9 percent, to 3.0 per 100,000. Twelve percent of all National Forensic Laboratory Information System (NFLIS) reports among seized and analyzed drug items in New York City were identified as heroin in 2013. According to New York State Prescription Drug Monitoring Program data, opioid analgesic prescriptions filled by New York City residents increased by 30 percent between 2008 and 2012, and oxycodone prescriptions increased by 83 percent during that period. The rate of New Yorkers filling high dose prescriptions increased from 28 per 1,000 population in 2008 to 48 per 1,000 in 2012. The New York City Department of Health and Mental Hygiene is conducting a qualitative study aimed to explore the circumstances of opioid analgesic initiation; the trajectory of opioid analgesic use, including the initiation of and transition to heroin; and the mechanisms by which opioid analgesics are diverted from medical to nonmedical use. Preliminary data identified three groups (not mutually exclusive) of opioid analgesic users. The first group is age 18–30; members of this age group typically begin misusing opioid analgesics recreationally and primarily obtain pills through street sources. The second group tends to be older (31 and older); they typically initiate their use through medical treatment and primarily obtain their pills through medical sources. The third group included more experienced, entrenched heroin users, who disperse their use with opioid analgesics and obtain pills both from street and medical sources. Preliminary qualitative findings also identified a spectrum of prescribers, ranging from aberrant, to loose, to routine, and to judicious. Cocaine was involved in 48 percent of unintentional drug poisoning deaths in 2012; there has been a steady decrease in the rate of cocaine-involved overdose deaths, from 8.0 per 100,000 population in 2006 to 5.2 per 100,000 in 2012. Cocaine ranked second, behind marijuana/cannabis, among reports from drug items analyzed in NFLIS laboratories; cocaine was detected in 32 percent of all drug reports. Marijuana indicators remained at a high level, although most were stable or decreasing after several years of increases. One-third of reports (33 percent) among drug items analyzed in NFLIS laboratories were identified as marijuana/cannabis, ranking the drug first among drug reports. As of June 30, 2013, 116,452 New Yorkers had been diagnosed with HIV or AIDS; this was an increase of 1.3 percent in the rate of persons living with HIV/AIDS from 2012 to 2013.

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INTRODUCTION

Area Description

New York City, with more than 8.4 million people, is the largest city in the United States. It is situated in the southeastern corner of the State on the Atlantic coast and encompasses an area of more than 300 square miles. New York City has nearly 600 miles of waterfront and one of the world's largest harbors.

According to U.S. Census Bureau population estimates, New York City's population increased from 8,175,133 in April of 2010 to 8,405,837 in July 2013. This is an increase of 230,704 residents, or approximately 2.8 percent. Among the five boroughs, Brooklyn had the largest percentage change (3.5 percent or 87,400 residents), followed by Queens (2.9 percent or 65,000), Manhattan (2.5 percent or 40,300), and the Bronx (2.4 percent or 33,600). Staten Island had the smallest gain (0.8 percent or 3,900). If the New York City 5 boroughs were compared with other cities, 4 out of the 5 would rank among the top 10 U.S. cities in population, with Brooklyn ranking 4th, Queens ranking 5th, Manhattan ranking 7th, and the Bronx ranking 10th. Historically, New York City has been home to a large multiracial, multiethnic population. New York City is the largest and most racially/ethnically diverse city in the country. As has been true throughout its history, immigration continues to shape the character of New York City. It has contributed to a substantial shift in the racial/ethnic composition of New York. Findings from the 2010 census show that the population diversity continues: 33 percent are White non-Hispanic; 23 percent are Black/African-American non-Hispanic; 29 percent are Hispanic; and 13 percent are Asian non-Hispanic.

According to the New York City Department of City Planning, approximately 1 in every 36 people living in the United States resides in New York City. New York City has the highest population density of any major city in the United States, with more than 27,000 people per square mile. New York City's population increase since April 2010 represented 84.5 percent of the total increase in New York State, which slightly raised the city's share of the State's population, from 42.2 to 42.8 percent. Approximately two-thirds of New York City dwellings are renter-occupied, more than twice the national average. More than 3 million New York City residents are foreign born, and more than one-quarter arrived in 2000 or later.

The average commute for New Yorkers is just under 40 minutes, about 15 minutes longer than the national average. New York City has the largest Chinese population outside of Asia and the largest Puerto Rican population of any U.S. city. Among Latinos in New York City, however, Puerto Ricans rank third, following Dominicans and Mexicans. An estimated 200 languages are spoken in New York City, and almost one-half of all New Yorkers speak a language other than English at home.²

New York City remains the economic hub of the Northeast. Its main occupations include management and professional, sales and office, and service. The unemployment rate in New York City for April 2013 was 8.4 percent; the rate for New York State was 7.8 percent. The unemployment rate for the Nation was 7.5 percent. The unemployment figures for April 2012 were 9.4 percent for New York City, 8.6 percent for New York State, and 8.1 percent for the Nation. According to the U.S. Census Bureau, American Community Survey, the median household income in New York City in 2011 was \$49,461, with 18 percent of its residents living below the Federal poverty level.

²This information was accessed from www.nyc.gov/html/dcp/html/census/popcur.shtml.

Data Sources

This report describes current drug abuse trends in New York City from 1997 to 2013, using the data sources summarized below:

- **Treatment admissions data** were provided by the New York State Office of Alcoholism and Substance Abuse Services (OASAS) for 1997–2012 and included admissions to both State-funded and nonfunded programs (extracted May 5, 2013). Demographic data are for 2012.
- **Emergency department (ED) data** were derived from the *Drug Abuse Warning Network (DAWN), 2011: Selected Tables of National Estimates of Drug-Related Emergency Department Visits*, Rockville, MD: Center for Behavioral Health Statistics and Quality (CBHSQ), Substance Abuse and Mental Health Services Administration (SAMHSA), 2013. Weighted ED visit data for calendar years 2004–2011 are based on a representative sample of hospitals in the five boroughs of New York City. The data are presented as estimates or rates per 100,000 population for ED visits involving selected drugs, with confidence intervals (denoted by CI) indicating the lower and upper bounds of the estimates/rates at the 95-percent confidence level. This report follows the SAMHSA convention of providing confidence intervals when making comparisons based on estimates or rates, and of not reporting estimates when the relative standard error is greater than 50 percent, or the number is less than 30. All increases or decreases in estimated ED visits noted are statistically significant at or below $p=.05$. Only weighted DAWN data released by SAMHSA can be used for trend analysis. A full description of the DAWN system can be found at <http://dawninfo.samhsa.gov/>.
- **Forensic laboratory testing data** for New York City were provided by the Drug Enforcement Administration (DEA)'s National Forensic Laboratory Information System (NFLIS) for January–December 2013. The data include New York Police Department laboratory data for the five boroughs of New York City from local as well as New York State and DEA laboratories. NFLIS methodology allows for the accounting of up to three drug reports per item submitted for analysis. The data presented are a combined count including primary, secondary, and tertiary reports for each drug item for the selected drugs. Data for 2013 are provisional and are subject to change.
- **Arrestee data** were derived from the Arrestee Drug Abuse Monitoring (ADAM) II program, *ADAM II 2012 Annual Report, Arrestee Drug Abuse Monitoring Program II, Office of National Drug Control Policy, May 2013*, and include weighted data on urinalysis test positivity for selected drugs from male arrestees in Manhattan, New York City.
- **Drug price, purity, and trafficking data** were provided by the DEA's *2011 Heroin Domestic Monitor Program (DMP) Report*, March 2013, and the *DEA New York Field Division Unified Intelligence Division: New York Area Drug Prices, July–December 2012*.
- **Prescription drug data** for New York City were derived from Paone, D., Tuazon, E., Bradley O'Brien, D. Unintentional Opioid Analgesic Poisoning (Overdose) Deaths in New York City, 2011. *New York City Department of Health and Mental Hygiene: Epi Data Briefs (27)*, May 2013.
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** were provided by the New York City Department of Health and Mental Hygiene, *HIV Epidemiology Program, for 1981–2011, including the HIV Epidemiology and Field Services Semiannual Report, Vol. 7, No. 2, January 1, 2011–December 31, 2011*.

DRUG ABUSE PATTERNS AND TRENDS

This report describes drug abuse patterns and trends for the five boroughs of New York City in 2013. The two key findings for New York City for 2013 were the continuing predominance in indicators for heroin and opioid analgesics. Opioids were involved in nearly three-quarters (71 percent) of unintentional drug poisoning deaths; nearly all such deaths (97 percent) involved more than one substance. Heroin, opioid analgesics, benzodiazepines, cocaine, alcohol, and methadone were the most common substances detected.

Cocaine

Cocaine indicators were mixed during this reporting period, with some remaining stable and some decreasing (exhibit 1). Nevertheless, the drug still accounted for major problems in New York City. Primary cocaine treatment admissions to State-funded and nonfunded programs in New York City declined from 17,572 in 1998 to 10,189 in 2012. Cocaine admissions reached the lowest number in more than 2 decades in 2012 and constituted 14 percent of New York City's 74,146 total drug and alcohol treatment admissions. In addition to these primary cocaine admissions, 15,248 admissions reported cocaine as a secondary substance, and 3,651 reported cocaine as a tertiary substance. Among the 74,146 drug and alcohol treatment admissions in 2012, 29,088 (39 percent) mentioned cocaine as a primary, secondary, or tertiary substance of abuse.

Exhibit 2 shows demographic characteristics of cocaine treatment admissions for 2012 by the two primary routes of administration: smoking crack (representing 61 percent of cocaine admissions) and using intranasal cocaine (representing 36 percent). Clients who smoked crack were more likely than intranasal users to be female (35 versus 23 percent), Black (67 versus 42 percent), and without income (36 versus 30 percent). Clients using intranasal cocaine were more likely to be Hispanic or White. For both groups, the secondary drugs of abuse tended to be alcohol and marijuana. Admissions for primary cocaine represented an aging population, and clients smoking crack tended to be older than those using intranasal cocaine.

Weighted DAWN ED estimates were available for New York City for the years 2004–2011. According to these estimates, 27,752 (CI=20,421–35,083) DAWN ED visits involved cocaine in 2011 (exhibit 3). Overall, this was a 36-percent increase from 2004, when there were an estimated 20,445 visits (CI=13,141–27,749). There was no change between 2011 and either 2010 or 2009.

DEA's NFLIS data showed that of the 35,605 total drug reports (primary, secondary, or tertiary) identified by forensic laboratories among seized drug items in New York City in 2013, 11,541 (32 percent) were identified as cocaine. While in prior years there had been more NFLIS reports for cocaine than for any other drug, for this reporting period there were slightly more reports for marijuana/cannabis.

ADAM II data for Manhattan male arrestees in 2013 showed New York has experienced a steady, significant decline in the proportion of arrestees testing positive for cocaine. New York also represents one of the more substantial declines in cocaine use, from 52 percent in 2000, to 25 percent in 2012, and to 32 percent in 2013.

Following a 4-year steady decrease in the rate of cocaine-involved drug poisoning deaths (overdose deaths) from 2006 to 2010, the rate of cocaine-involved deaths increased by 18 percent from

2010 to 2012, from 4.4 to 5.2 per 100,000 population. In 2012, cocaine was involved in 48 percent of overdose deaths, making it the third highest proportion among overdose deaths compared with all other substances. In 2012, residents in the Bronx had the highest rate (7.2 per 100,000) of drug poisoning deaths involving cocaine, followed by Staten Island (6.2 per 100,000). From 2000 through 2012, New Yorkers age 45–54 had the highest rate of overdose deaths involving cocaine (11.3 per 100,000); this was almost two times the rates of all other age groups. Residents of neighborhoods with the highest levels of poverty had a higher rate of cocaine overdose deaths (8.5 per 100,000) than residents of all other neighborhoods in 2012. From 2010 to 2012, residents of the neighborhoods with the lowest levels of poverty had the largest increase in rates (by 105 percent). In 2012, the rate of cocaine overdose deaths among White New Yorkers (6.7 per 100,000) exceeded that of black New Yorkers (6.5 per 100,000) and Hispanic New Yorkers (5.3 per 100,000).

Heroin

Heroin continued to be a major drug problem in New York City (exhibit 4). Overall, the trends in heroin indicators were mixed. For example, more than one-quarter of New York City's primary treatment admissions in 2012 were for heroin. Primary heroin admissions to treatment programs in New York City for the first half of 2012 decreased to the lowest half-yearly total since 1996. For the entire year, however, the numbers were similar to 2011 and constituted more than 25 percent of New York City's 74,146 drug treatment admissions. In addition to the 19,075 primary heroin admissions in 2012, heroin was reported as a secondary substance of abuse for 2,370 admissions and as a tertiary drug for 1,068 admissions.

Other changes were observed in mode of heroin use. Intranasal heroin use may have peaked in the second half of 1998, with 62 percent of heroin admissions to all New York City drug treatment programs reporting this as their primary route of administration. Since then, the proportions reporting intranasal use have declined. In 2012, the proportion using primarily intranasally was 55 percent. Meanwhile, heroin injection increased among heroin admissions, from 32 percent in the second half of 1998 to 44 percent in 2012; this represented the highest percentage of injectors since 1995.

Exhibit 5 highlights general demographic characteristics of clients admitted to all New York City treatment programs citing heroin as their primary drug in 2012, by primary mode of use. In general, primary heroin admissions were predominantly male (77 percent) and 35 and older (76 percent). They were more likely to be Hispanic (43 percent) than Black (24 percent) or White (26 percent), and they were likely to have cocaine identified as a secondary drug of abuse (40 percent). Compared with heroin injectors, intranasal users were more likely to be Black (35 versus 11 percent). In contrast, heroin injectors were more likely than intranasal users to be White (40 versus 15 percent), to have cocaine identified as a secondary drug of abuse (44 versus 36 percent), and to have started use before reaching age 20 (52 versus 40 percent).

In addition to heroin admissions to traditional treatment programs, heroin admissions for detoxification or crisis services in New York City have become sizable in number. These special services are usually short-term, provided in a hospital or community-based setting, and are medically supervised. In 1995, 4,503 such admissions were reported involving heroin abuse. In 2012, the number of heroin admissions was 12,500. While that represents an overall increase since 1995, the number of heroin admissions for crisis services in 2012 was essentially the same as in 2010 and 2011 (when there were 12,517 and 12,609 heroin admissions, respectively).

ADAM II 2013 data show that among New York City arrestees, 26 percent had ever received outpatient treatment for heroin, and 28 percent had received inpatient treatment. Additionally, in New York City, 87 percent of male arrestees had a prior arrest. Among New York City arrestees, those testing urinalysis-positive for opioids (i.e., heroin or prescription painkillers) declined significantly by more than one-half from a high of 20 percent in 2000 to 8 percent in 2013.

For the 5 boroughs of New York City, weighted DAWN data for 2004 through 2011 showed that in 2004, there were 13,383 (CI=8,541–18,225) estimated heroin-involved ED visits, while in 2011, there were 12,015 (CI=8,782–15,248) such visits. There were no significant changes for heroin-involved visits between 2004 and 2011.

NFLIS data showed that 12 percent of the 35,605 total drug reports identified among drug items seized and analyzed by NFLIS laboratories in New York City in 2013 ($n=4,288$) were identified as heroin.

Following a 4-year steady decrease in the rate of heroin-involved drug poisoning deaths (overdose deaths) from 2006 to 2010, the rate of heroin-involved deaths increased by 84 percent from 2010 to 2012, from a rate of 3.1 to 5.7 per 100,000 population. In 2012, heroin was involved in 52 percent of overdose deaths, and heroin had a higher rate than any other substance. In 2012, Staten Island residents had the highest rate (10.2 per 100,000) of drug poisoning deaths involving heroin, followed by the Bronx (8.8 per 100,000). From 2000 through 2012, New Yorkers age 35–54 had the highest rate of overdose deaths involving heroin. In 2012, the rate among New Yorkers age 35–54 (9.3 per 100,000) was more than two times higher than the rate for those younger than 35 (4.4 per 100,000) and was three times the rate of New Yorkers 55 and older (93.1 per 100,000). Between 2010 and 2012, the heroin overdose rate increased by 110 percent among New Yorkers younger than 35 (2.1 to 4.4 per 100,000). Residents of neighborhoods with the highest poverty levels had a higher rate of heroin overdose deaths (7.9 per 100,000) than residents of all other neighborhoods in 2012. From 2010 to 2012, residents of neighborhoods with the lowest poverty levels had the largest increase in rates (by 300 percent). In 2012, the rate of heroin overdose deaths among White New Yorkers (8.9 per 100,000) was higher than those for Hispanic New Yorkers (6.2 per 100,000) and Black New Yorkers (6.4 per 100,000).

Opioid Analgesics

The rate of drug poisoning deaths involving opioid analgesics increased by 267 percent from 2000 to 2011, from 0.9 to 3.3 per 100,000 population (59 versus 220 deaths). In other words, more than one overdose death involving an opioid analgesic occurred every other day in New York City. From 2011 to 2012, the rate of opioid analgesic deaths decreased by 9 percent, to 3.0 per 100,000. Opioid analgesics were involved in 28 percent of overdose deaths in 2012. Residents of Staten Island continued to have the highest overdose death rate (10 per 100,000), with disparities between boroughs increasing rapidly between 2005 and 2011. While rates increased across all boroughs, they increased by 261 percent in Staten Island, from 3.1 to 11.2 per 100,000. The rate of opioid analgesic overdose deaths was highest among White New Yorkers (5.4 per 100,000) versus Black New Yorkers (2.7 per 100,000) and Hispanic New Yorkers (2.2 per 100,000). Residents of neighborhoods with the lowest poverty levels had the highest rate (4.2 per 100,000) of opioid analgesic overdose than residents of all other neighborhoods in 2012.

New York State Prescription Drug Monitoring Program data obtained from the Bureau of Narcotic Enforcement, show that opioid analgesic prescriptions filled by New York City residents increased by 31 percent between 2008 and 2012, with more than 2 million prescriptions filled. Oxycodone was the most common type of opioid analgesic filled, with more than 1 million oxycodone prescriptions filled in 2012. Oxycodone prescriptions increased by 83 percent from 2008 to 2012. Female New Yorkers filled more opioid analgesic prescriptions than males (representing 57 percent of opioid analgesic prescriptions, or 95 per 1,000 females, versus 82 per 1,000 males). New Yorkers age 45 and older had a higher rate of prescriptions filled (139 per 1,000 residents) than residents age 44 and younger (65 per 1,000 residents). The median day supply for New York City residents was 20 days in 2012, and 48 per 1,000 residents filled high-dose prescriptions (100 or more morphine equivalents daily). Residents of Staten Island more frequently filled high-dose prescriptions than residents of all other boroughs.

The New York City Department of Health and Mental Hygiene is conducting a qualitative study aimed to explore the circumstances of opioid analgesic initiation; the trajectory of opioid analgesic use, including the initiation of and transition to heroin; and the mechanisms by which opioid analgesics are diverted from medical to nonmedical use. The study involves in-depth interviews with key informants ($n=20$), focus groups ($n=5$), and in-depth interviews with individuals who have knowledge about opioid misuse or are themselves misusing opioids ($n=77$ to date). Preliminary data have identified three groups (not mutually exclusive) of opioid analgesic users. The first group is age 18–30; they typically begin misusing opioid analgesics recreationally and primarily obtain pills through street sources. The second group tends to be older (31 and older); they typically initiate their use through medical treatment and primarily obtain their pills through medical sources. The last group includes more experienced, entrenched heroin users who disperse their use with opioid analgesics and obtain pills both from street and medical sources.

Findings also highlight varying levels of prescriber oversight. Preliminarily, there are four typologies to describe the continuum of oversight related to prescribing practices: aberrant, loose, routine, and judicious. In brief, aberrant prescribers make little pretense about the nature of their practice and will prescribe to anyone with the necessary means to pay for the prescription (usually a cash fee). Loose prescribers are likely to make an effort at documentation to protect themselves in the event they are investigated, but they prescribe freely with minimal oversight. Routine prescribers write warranted prescriptions for opioid analgesics, but they may continue to prescribe without careful followup or thoughtful alternative strategies for managing chronic pain. Finally, judicious prescribers are those who prescribe opioid analgesics carefully and do not write refills or increase dosage without a thorough examination. As analysis progresses, these typologies will be finalized, and further findings will be presented on trajectory and patterns of use and the dynamics of the illicit opioid analgesic market.

Benzodiazepines/Barbiturates

In 2011, for the 5 boroughs of New York City, there were an estimated 5,175 (CI=3,916–6,435) benzodiazepine-involved DAWN ED visits (exhibit 3). This was a significant increase (by 134 percent) from 2004, when there were an estimated 2,213 visits (CI=1,677–2,748) involving benzodiazepines. From 2009 to 2011, benzodiazepine ED visits increased by 43 percent. Within this class of substances, the specific drugs most frequently mentioned in 2011 ED visits were alprazolam ($n=2,515$, CI=1,866–3,165), which increased by 164 percent between 2004 and 2011, by 48 percent between

2009 and 2011, and by 18 percent between 2010 and 2011; clonazepam ($n=1,143$, $CI=790-1,497$), which increased by 83 percent between 2004 and 2011 and by 53 percent between 2009 and 2011; diazepam ($n=254$, $CI=159-350$), which showed no change; and lorazepam ($n=313$, $CI=211-414$), which increased by 82 percent from 2004.

According to 2013 NFLIS data, 4.3 percent ($n=1,533$) of the total drug reports identified by laboratories among seized and analyzed drug items in New York City were identified as alprazolam, ranking fourth among drugs reported. Clonazepam ranked ninth and was found in 492 reports.

The rate of benzodiazepine-involved deaths increased by 180 percent between 2000 and 2012, from 1.5 to 4.2 per 100,000 population. Alprazolam was the most common type of benzodiazepine; the drug was present in 26 percent of those deaths. In 2012, benzodiazepine-involved deaths increased by 11 percent since 2006 (when such deaths were at the then highest rate), from 3.8 to 4.2 per 100,000. In 2012, benzodiazepines were involved in 38 percent of overdose deaths. Staten Island residents had the highest rate (11.7 per 100,000) of drug poisoning deaths involving benzodiazepines; this was more than two times the rate of Bronx residents (5.4 per 100,000) and more than three times the rate of Brooklyn residents (3.9 per 100,000). From 2000 through 2012, New Yorkers age 45–54 had the highest rate of overdose deaths involving benzodiazepines. In 2012, the rate among New Yorkers age 45–54 was 7.9 per 100,000. Between 2010 and 2012, the rate increased among all age groups except for those age 65 and older. Residents of neighborhoods with the lowest poverty levels had a higher rate of benzodiazepine overdose deaths (5.4 per 100,000) than residents of all other neighborhoods in 2012. From 2010 to 2012, residents of these neighborhoods had the largest increase in rates (80 percent). In 2012, the rate of benzodiazepine overdose deaths among White New Yorkers (8.3 per 100,000) was more than two times the rate for Hispanic New Yorkers (3.4 per 100,000) and more than four times the rate for Black New Yorkers (2.0 per 100,000).

Methamphetamine/Amphetamines

Although methamphetamine was popular in other parts of the Nation, most indicators related to the drug in New York City in 2013 remained at low levels. With respect to law enforcement indicators, NFLIS data showed that less than 1.0 percent ($n=319$) of the 35,605 drug reports among drug items seized and analyzed in forensic laboratories in New York City were identified as methamphetamine. Methamphetamine data were not available in ADAM II data for Manhattan male arrestees in 2013.

Marijuana

Marijuana indicators remained at a high level, although most were stable or decreasing after several years of increases. One-third of reports among drug items analyzed in NFLIS laboratories were identified as marijuana/cannabis; the drug had the highest proportion of all drugs. Nearly one-half (44 percent) of New York City arrestees (ADAM II, 2013) tested positive for marijuana in 2013; the proportion fluctuated between 38 and 52 percent from 2000 to 2013.

Other Drugs

MDMA (3,4-Methylenedioxymethamphetamine)

“Club drugs” are a collection of various synthetic chemical compounds that are often abused by young people in a variety of social settings, such as dance clubs, after-hour clubs, and other special events. Club drugs include MDMA, ketamine, and GHB (gamma hydroxybutyrate). Many of the club drugs have stimulant or hallucinogenic properties.

According to the weighted DAWN ED data for the 5 boroughs of New York City, an estimated 372 (CI=257–488) MDMA-involved ED visits were reported in 2004 (exhibit 3). The estimate in 2011 was 956 (CI=789–1,122); this represented a 157-percent increase from 2004. ED visits involving MDMA also increased by 39 percent between 2009 and 2011.

In 2013, 133 of the drug reports detected among seized and analyzed drug items were identified by NFLIS laboratories in New York City as MDMA. According to the DEA New York Field Division, MDMA sold for \$2.25–\$4.50 per dosage unit mid-level and for \$12–\$30 per dosage unit retail at the end of 2012.

Ketamine

Ketamine was found in 353 (1.0 percent) of the drug reports among items seized and analyzed in NFLIS laboratories in New York City in 2013; ketamine reports ranked in 10th place among all drug reports.

PCP (Phencyclidine)

PCP (“angel dust”) continued to be available in some areas of New York City. For the 5 boroughs of New York City, there were an estimated 3,239 (CI=2,562–3,916) DAWN PCP-involved ED visits in 2011; this represented a 618-percent increase from the 451 (CI=335–567) visits in 2004. These visits also increased by 194 percent since 2009 and by 60 percent since 2010. PCP-involved DAWN visits represented the highest proportion of any illicit drug other than cocaine, heroin, and marijuana (exhibit 3). PCP ranked seventh ($n=586$, 1.6 percent) among all drug reports identified by NFLIS laboratories among analyzed drug items in New York City in 2013.

LSD (Lysergic Acid Diethylamide)

LSD is a strong hallucinogen that has not been a major problem in New York City since the late 1960s and early 1970s. According to DAWN ED data for New York City, there were an estimated 158 (CI=95–122) LSD-involved visits in 2011. Despite the fact that these numbers are small, they represent a 107-percent increase since 2004 and an 84-percent increase since 2009.

BZP (1-Benzylpiperazine)

There were 89 drug reports identified as BZP, an illegal synthetic stimulant, among drug items seized and analyzed by New York City NFLIS laboratories in 2013.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

The AIDS epidemic, with its impact on injection drug users (IDUs), has played a crucial role in shaping the New York City drug scene over the last two decades. HIV first emerged in New York City in the mid- to late-1970s. AIDS reporting was mandated in 1983, but reporting of HIV infection began in June 2000.

As of June 30, 2013, 116,452 New Yorkers had been diagnosed with HIV or AIDS. This represents an increase of 1.3 percent in the rate of persons living with HIV/AIDS (PLWHA) from 2012 to 2013. In 2013, 48,523 (41.7 percent) were living with HIV (non-AIDS), and 67,929 (58.3 percent) were living with AIDS. According to the New York City Department of Health and Mental Hygiene, the true number of PLWHA was actually higher, since they estimate that one-quarter of persons living with HIV have never been tested and do not know that they are infected. In 2013, there were 777 deaths among PLWHA in New York City.

Of the 116,452 PLWHA in New York City as of June 30, 2013, 72 percent were male, and 28 percent were female. In terms of race/ethnicity, 44 percent were Black; 32 percent were Hispanic; and 21 percent were White. For transmission risk factors, 37 percent ($n=42,958$) were men who have sex with men (MSM); 17 percent ($n=19,391$) had an injection drug use history; 20 percent reported a heterosexual transmission factor; 2 percent had a perinatal transmission risk factor; less than 1 percent had another risk factor; and 24 percent had an unknown risk factor or were under investigation.

According to the New York City Department of Health and Mental Hygiene *HIV Epidemiology Program 2nd Semiannual Report*, important trends include the following. In 2013, there were 1,439 new diagnoses of HIV in New York City. Four out of five (81.2 percent) of these new diagnoses were male; 18.8 percent were female. Seventy-seven percent of new diagnoses were among Black and Hispanic New Yorkers.

Comparing 2013 with previous years, annual AIDS diagnoses in New York City continued to decrease, including a 27-percent decrease in the number of AIDS diagnoses between 2010 and 2012. The number of new HIV diagnoses decreased from 2010 to 2013 from 3,481 to 1,439. Although the total number of HIV diagnoses decreased among MSM from 2010 to 2013, the percentage of all new HIV diagnoses among MSMs continued to increase. In 2013, 60 percent of new HIV diagnoses were among MSM compared with 50 percent in 2010.

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Exhibit 1. Trends in Selected Indicator Data for Cocaine, New York City: 1997–2012 (Semiannual and Annual)

Year	Semiannual/ Annual Periods	Number of Deaths Involving Cocaine ¹	Number of Cocaine- Involved Estimated ED Visits ²	Number of Treatment Admissions: Cocaine as Primary Drug of Abuse ³	Number of Cocaine Arrests ⁴	Number of Births to Women Using Cocaine ⁵
1997	1H	—	—	9,048	—	—
	2H	—	—	8,401	—	—
	Total	—	—	17,449	35,431	864
1998	1H	—	—	8,999	—	—
	2H	—	—	8,573	—	—
	Total	—	—	17,572	35,577	742
1999	1H	—	—	8,346	—	—
	2H	—	—	7,567	—	—
	Total	—	—	15,913	31,781	626
2000	1H	—	—	7,337	—	—
	2H	—	—	6,722	—	—
	Total	339	—	14,059	31,919	490
2001	1H	—	—	7,343	—	—
	2H	—	—	7,032	—	—
	Total	386	—	14,375	23,498	438
2002	1H	—	—	7,736	—	—
	2H	—	—	7,872	—	—
	Total	420	—	15,608	26,773	363
2003	1H	—	—	8,203	—	—
	2H	—	—	7,911	—	—
	Total	407	—	16,114	25,868	354
2004	1H	—	—	8,410	—	—
	2H	—	—	8,301	—	—
	Total	433	20,445	16,711	27,963	337
2005	1H	—	—	8,215	—	—
	2H	—	—	7,741	—	—
	Total	503	30,478	15,956	26,773	301
2006	1H	—	—	8,582	—	—
	2H	—	—	8,868	—	—
	Total	508	36,791	17,450	27,992	298
2007	1H	—	—	8,618	—	—
	2H	—	—	7,988	—	—
	Total	429	35,706	16,606	—	—
2008	1H	—	—	8,180	—	—
	2H	—	—	7,568	—	—
	Total	334	31,647	15,748	—	—
2009	1H	—	—	6,978	—	—
	2H	—	—	6,766	—	—
	Total	309	25,951	13,744	—	—
2010	1H	—	—	6,491	—	—
	2H	—	—	6,183	—	—
	Total	289	27,726	12,674	—	—
2011	1H	—	—	5,927	—	—
	2H	—	—	5,405	—	—
	Total	319	27,752	11,332	—	—
2012	1H	—	—	5,393	—	—
	2H	—	—	4,796	—	—
	Total	348	—	10,189	—	—

¹New York City Department of Health and Mental Hygiene.²DAWN, CBHSQ, SAMHSA, 2011.³New York State Office of Alcoholism and Substance Abuse Services-funded and nonfunded treatment admissions.⁴New York City Police Department.⁵New York Department of Health and Mental Hygiene.

SOURCES: DAWN, CBHSQ, SAMHSA; New York State Office of Alcoholism and Substance Abuse Services; New York City Police Department; and New York City Department of Health and Mental Hygiene

Exhibit 2. Characteristics of Primary Cocaine Admissions¹ to State-Funded² and Nonfunded³ Treatment Programs, by Route of Administration and Percentage, New York City: 2012

Demographic Characteristic	Percentage of Total (N=10,189)	Percentage Smoking Crack (n=6,198)	Percentage Using Cocaine Intranasally (n=3,628)
Gender			
Male	70	65	77
Female	30	35	23
Age at Admission			
25 and Younger	5	3	7
26–34	14	11	18
35 and Older	81	85	75
(Average Age)	(43.4)	(44.4)	(42.0)
Race			
Black	57	67	42
Hispanic	24	18	33
White	14	11	18
No Source of Income ⁴	34	36	30
Readmissions	82	86	75
Age of First Use			
14 and Younger	7	6	9
15–19	31	28	37
20–29	43	45	39
30 and Older	19	22	15
Secondary Drug of Abuse			
Alcohol	36	38	33
Marijuana	23	22	25
Heroin	8	7	9

¹Figures on this table may differ somewhat from figures cited on other tables, because computer runs may have been executed at different times and files are being updated continuously.

²State-funded programs receive some or all funding through the New York State Office of Alcoholism and Substance Abuse Services.

³Nonfunded programs receive funding through sources other than through the New York State Office of Alcoholism and Substance Abuse Services, including Medicaid, private insurance reimbursements, and patient fees (self-pay).

⁴Defined as not earning income, not receiving support from family or significant others, and not receiving any public assistance.

SOURCE: New York State Office of Alcoholism and Substance Abuse Services

Exhibit 3. Estimated Drug-Related ED Visits for Selected Illicit, Psychotherapeutic, and CNS¹ Drugs of Abuse, with Relative Standard Errors and Confidence Intervals,² New York City: 2011

Selected Drugs	Estimated Number of Visits³	Relative Standard Error (RSE) as Percentage	Lower 95% Confidence Limit²	Upper 95% Confidence Limit²
Nonalcohol Illicit Drugs	79,149	9.6	64,187	94,110
Cocaine	27,752	13.5	20,421	35,083
Heroin	12,015	13.7	8,782	15,248
Marijuana	19,224	9.5	15,635	22,813
Methamphetamine	576	22.6	320	831
MDMA	956	8.9	789	1,122
PCP (Phencyclidine)	3,239	10.7	2,562	3,916
Nonmedical Use of Pharmaceuticals	24,300	7.5	20,710	27,891
<i>Psychotherapeutic Agents</i>				
Benzodiazepines	5,175	12.4	3,916	6,435
<i>Selected CNS Agents</i>				
Opiates/Opoids	9,709	10.3	7,751	11,667
<i>Narcotic Analgesics</i>	7,389	10.1	5,928	8,849
Hydrocodone	324	13.7	237	411
Methadone	4,882	13.3	3,613	6,152
Morphine	228	11.3	178	279
Oxycodone	1,443	10.6	1,143	1,743

¹CNS=Central Nervous System.

²Confidence intervals showing the lower and upper bounds at 95-percent confidence level.

³Summing or combining visits produces incorrect and inflated counts.

SOURCE: Site-specific data obtained by request from DAWN, CBHSQ, SAMHSA

Exhibit 4. Trends in Selected Indicator Data for Heroin, New York City: 1997–2012 (Semiannual and Annual)

Year	Semiannual/ Annual Period	Number of Deaths Involving Heroin ¹	Number of Heroin/Morphine- Involved Estimated ED Visits ²	Number of Treatment Admissions: Heroin as Primary Drug of Abuse ³	Number of Heroin Arrests ⁴	Average Purity of Street Heroin (%) ⁵
1997	1H	—	—	10,276	—	—
	2H	—	—	10,431	—	—
	Total	—	—	20,707	35,325	(62.5)
1998	1H	—	—	10,793	—	—
	2H	—	—	10,203	—	—
	Total	—	—	20,996	37,483	(63.6)
1999	1H	—	—	10,690	—	—
	2H	—	—	10,189	—	—
	Total	—	—	20,879	32,949	(61.8)
2000	1H	—	—	10,944	—	—
	2H	—	—	10,672	—	—
	Total	373	—	21,616	33,665	(62.9)
2001	1H	—	—	11,324	—	—
	2H	—	—	11,455	—	—
	Total	416	—	22,779	27,863	(56.0)
2002	1H	—	—	11,357	—	—
	2H	—	—	11,157	—	—
	Total	400	—	22,514	34,098	(61.4)
2003	1H	—	—	11,540	—	—
	2H	—	—	12,023	—	—
	Total	438	—	23,563	—	(53.5)
2004	1H	—	—	12,059	—	—
	2H	—	—	11,743	—	—
	Total	358	13,383	23,802	—	(43.3)
2005	1H	—	—	11,127	—	—
	2H	—	—	10,665	—	—
	Total	379	18,179	21,792	—	(49.4)
2006	1H	—	—	11,189	—	—
	2H	—	—	11,055	—	—
	Total	388	17,892	22,244	—	(44.5)
2007	1H	—	—	11,356	—	—
	2H	—	—	11,256	—	—
	Total	301	16,884	22,612	—	(49.0)
2008	1H	—	—	11,024	—	—
	2H	—	—	11,700	—	—
	Total	317	16,084	22,724	—	(47.1)
2009	1H	—	—	10,689	—	—
	2H	—	—	11,242	—	—
	Total	288	12,802	21,931	—	(44.1)
2010	1H	—	—	10,008	—	—
	2H	—	—	9,200	—	—
	Total	209	12,226	19,208	—	(31.6)
2011	1H	—	—	9,401	—	—
	2H	—	—	9,315	—	—
	Total	284	12,015	18,716	—	(37.5)
2012	1H	—	—	9,221	—	—
	2H	—	—	9,854	—	—
	Total	382	—	19,075	—	—

¹New York City Department of Health and Mental Hygiene.²DAWN, CBHSQ, SAMHSA, 2011.³New York State Office of Alcoholism and Substance Abuse Services-funded and nonfunded treatment admissions.⁴New York City Police Department.⁵DEA.

SOURCES: DAWN, CBHSQ, SAMHSA; New York State Office of Alcoholism and Substance Abuse Services; New York City Police Department; DEA

Exhibit 5. Characteristics of Primary Heroin Admissions¹ to State-Funded² and Nonfunded³ Treatment Programs by Route of Administration and Percentage, in New York City: 2012

Demographic Characteristic	Percentage of Total (N=19,075)	Percentage Using Heroin Intranasally (n=10,454)	Percentage Injecting Heroin (n=8,303)
Gender			
Male	77	77	77
Female	23	23	23
Age at Admission			
25 and Younger	7	4	11
26–34	17	11	25
35 and Older	76	85	64
(Average Age)	(42.9)	(45.2)	(40.1)
Race			
Black	24	35	11
Hispanic	43	44	43
White	26	15	40
No Source of Income ⁴	36	34	38
Readmissions	87	86	89
Age of First Use			
14 and Younger	11	10	13
15–19	34	30	39
20–29	38	38	38
30 and Older	17	22	10
Secondary Drug of Abuse			
Alcohol	12	13	10
Marijuana	10	11	8
Cocaine	40	36	44

¹Figures on this table may differ somewhat from figures cited on other tables, because computer runs may have been executed at different times and files are being updated continuously.

²State-funded programs receive some or all funding through the New York State Office of Alcoholism and Substance Abuse Services.

³Nonfunded programs receive funding through sources other than the New York State Office of Alcoholism and Substance Abuse Services, including Medicaid, private insurance reimbursements, and patient fees (self-pay).

⁴Defined as not earning income, not receiving support from family or significant others, and not receiving any public assistance.

SOURCE: New York State Office of Alcoholism and Substance Abuse Services

Exhibit 6. Trends in Selected Indicator Data for Marijuana, New York City: 1997–2012 (Semi-annual and Annual)

Year	Semiannual/ Annual Period	Number Marijuana- Involved Estimated ED Visits ¹	Number of Treatment Admissions: Marijuana as Primary Drug of Abuse ²	Number of Marijuana/ Cannabis Arrests ³
1997	1H	—	3,794	—
	2H	—	3,657	—
	Total	—	7,451	27,531
1998	1H	—	4,554	—
	2H	—	4,473	—
	Total	—	9,027	42,030
1999	1H	—	5,119	—
	2H	—	5,100	—
	Total	—	10,219	43,122
2000	1H	—	5,664	—
	2H	—	5,487	—
	Total	—	11,151	60,455
2001	1H	—	6,677	—
	2H	—	6,593	—
	Total	—	13,270	47,651
2002	1H	—	7,512	—
	2H	—	6,798	—
	Total	—	14,310	47,250
2003	1H	—	6,844	—
	2H	—	6,627	—
	Total	—	13,471	—
2004	1H	—	6,835	—
	2H	—	6,468	—
	Total	5,920	13,303	—
2005	1H	—	7,161	—
	2H	—	6,954	—
	Total	10,192	14,115	—
2006	1H	—	8,158	—
	2H	—	8,128	—
	Total	12,938	16,286	—
2007	1H	—	8,809	—
	2H	—	8,514	—
	Total	14,500	17,323	—
2008	1H	—	9,836	—
	2H	—	9,821	—
	Total	16,204	19,657	—
2009	1H	—	9,977	—
	2H	—	10,899	—
	Total	15,310	20,876	—
2010	1H	—	11,541	—
	2H	—	10,530	—
	Total	18,102	22,071	—
2011	1H	—	10,566	—
	2H	—	9,394	—
	Total	19,224	19,960	—
2012	1H	—	9,490	—
	2H	—	8,692	—
	Total	—	18,182	—

¹DAWN, CBHSQ, SAMHSA.²New York State Office of Alcoholism and Substance Abuse Services-funded and nonfunded treatment admissions.³New York City Police Department.

SOURCES: DAWN, CBHSQ, SAMHSA; New York State Office of Alcoholism and Substance Abuse Services; New York City Police Department

Exhibit 7. Characteristics of Primary Marijuana Admissions¹ to State-Funded² and Nonfunded³ Treatment Programs, by Percentage, New York City: 2012

Demographic Characteristic	Percentage of Total (N=18,182)
Gender	
Male	77
Female	23
Age at Admission	
17 and Younger	10
18–25	33
26–34	31
35 and Older	26
(Average Age)	(29.1)
Race	
Black	55
Hispanic	30
White	7
No Source of Income ⁴	29
Readmissions	60
Age of First Use	
14 and Younger	51
15–19	41
20–29	6
30 and Older	1
Secondary Drug of Abuse	
Alcohol	34
Cocaine	9

¹Figures on this table may differ somewhat from figures cited on other tables, because computer runs may have been executed at different times and files are being updated continuously.

²State-funded programs receive some or all funding through the New York State Office of Alcoholism and Substance Abuse Services.

³Nonfunded programs receive funding through sources other than the Office of Alcoholism and Substance Abuse Services, including Medicaid, private insurance reimbursements, and patient fees (self-pay).

⁴Defined as not earning income, not receiving support from family or significant others, and not receiving any public assistance.

SOURCE: New York State Office of Alcoholism and Substance Abuse Services